

Water Words

B

Back pressure:

A pressure that can cause water to backflow into the water supply when a user's wastewater system is at a higher pressure than the public system.

Backflow/back siphonage:

A reverse flow condition created by a difference in water pressures that causes water to flow back into the distribution pipes of a drinking water supply from any source other than the intended one.

Background level:

1. The concentration of a substance in an environmental media (water or soil) that occurs naturally or is not the result of human activities.

Backwashing:

Reversing the flow of water back through the filter media to remove entrapped solids.

Bacteria:

Microscopic living organisms that can aid in pollution treatment or remediation by metabolizing organic matter. In contrast, bacteria in soil, water or air can cause human, animal and plant health problems.

The Bagley-Keene Open Meeting Act:

State law requiring state entities such as the Water Boards to notify the public of upcoming meeting and to conduct them in public.

Bank-full capacity

The rate of water flow that completely fills a channel (e.g. the flow rate at which the water surface is level with the flood plain).

Bar screen

In wastewater treatment, a device used to remove large solids.

Basin plan

(See Water Quality Control Plans)

Beach closure

An area of a beach that has been contaminated by pollution, determined to be a public health risk, and closed to the public by a local health department.

Bedload:

The particles in a stream channel that mainly move by bouncing, sliding, or rolling on or near the bottom of the stream.

Beneficial uses of water:

The uses of water protected against degradation, such as: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation and preservation of fish and wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or groundwater after Nov. 28, 1975 and potential beneficial uses are uses that would develop in the future through control measures.

Best Management Practices (BMPs):

Methods or measures designed and selected to reduce or eliminate the discharge of pollutants from point and nonpoint source discharges. As used in the stormwater context, BMPs are a schedule of activities, prohibitions of practices, maintains procedures and other management practices to prevent or reduce the pollution of waters of the state. BMPs include treatment requirements, operating procedure and practices to control plant site runoff, spills or leaks, sludge or waste disposal, or drainage from raw material storage.

Bioaccumulants:

Substances that increase in concentration in living organisms as they take in contaminated water, or food because the substances are very slowly metabolized or excreted. (See Biological magnification)

Bioassay:

A test to determine the relative strength of a substance by comparing its effect on a test organism with that of a standard preparation.

Bioassessment:

Monitoring the aquatic environment to determine the health of a stream.

Biological integrity:

The ability to support and maintain balanced, integrated functionality in the natural habitat of a given region. The concept is applied primarily in drinking water management.

Biological magnification:

Refers to the process whereby certain substances such as pesticides or heavy metals move up the food chain, work their way into rivers or lakes, and are eaten by aquatic organisms such as fish, which in turn are eaten by large birds, animals or humans. The substances become concentrated in tissues or internal organs as they move up the chain. (See Bioaccumulants)

Biological oxidation:

Decomposition of complex organic materials by microorganisms. Occurs in self-purification of water bodies and in activated sludge wastewater treatment.

Biological treatment:

A treatment technology that uses bacteria to consume organic waste.

Bioremediation:

Use of living organisms to clean up oil spills or remove other pollutants from soil, water, or wastewater; use of organisms such as non-harmful insects to remove agricultural pests or counteract diseases of trees, plants, and garden soil.

Biosolids:

Wastewater treatment residuals, not including material removed during preliminary treatment, treated to levels that allow agronomic use in accordance with federal law.

Bloom:

A proliferation of algae and/or higher aquatic plants in a body of water; often related to pollution, especially when pollutants accelerate growth.

Brackish:

Mixed fresh and salt water.

Breakpoint chlorination:

Addition of chlorine to water until the chlorine demand has been satisfied.

Brine mud:

Waste material, often associated with well-drilling or mining, composed of mineral salts or other inorganic compounds.

British Thermal Unit (BTU):

Unit of heat energy equal to the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit at sea level.

Brownfields:

Generally speaking, Brownfields are abandoned, or unused industrial and commercial facilities/sites where expansion or redevelopment is complicated by real or perceived environmental contamination. They can be in urban, suburban, or rural areas. EPA's Brownfields initiative helps communities mitigate potential health risks and restore the economic viability of such areas or properties.